

Fletcher N. Platt, Jr., P.E.
Executive Vice President

June 1, 1998

Mayor Joseph Vas
City of Perth Amboy
260 High Street
Perth Amboy, N.J. 08861

**RE: Madison Industries, CPS/Madison Site, Old Bridge Township
Response to NJDEP Letter Dated May 7, 1998
ETKA Job #206020**

Dear Mayor Vas:

We have received a response letter dated May 7, 1998 from the New Jersey Department of Environmental Protection (NJDEP) regarding the continuing discharge of heavy metals into Prickett Brook. I continue to have great concern for the lack of attention and failure to take enforcement actions against Madison to remediate and protect the Runyon Watershed. The NJDEP Letter of May 7, 1998 signed by Paul Harvey, Case Manager did not address our specific concerns regarding NJDEP's lack of enforcement in addressing the present and continuing discharge of heavy metals into Pickets Brook as addressed in my letter of March 27, 1998.

Madison continues to discharge heavy metal contamination into Pricketts Brook which flows onto the Perth Amboy Runyon Watershed, into the South River and ultimately into Raritan Bay. After 20 years of evaluation and seven years of remedial efforts by Madison, the release of contamination into the Pricketts Brook continues. The NJDEP case manager has offered no response as to why the noted discharge is allowed to continue and has defended the inaction by Madison Industries.

With regards to surface water quality, NJDEP indicates that "significant" progress is being made in improving surface water quality. Their conclusion appears to be based a reduction of contaminants detected at sampling points SW-2, SW-3 and SW-4 in the most recent sampling data. The use of only March and April 1998 data is inappropriate as it is a period of high precipitation which dilutes the contamination in the groundwater and particularly the surface water.

Killam has tabulated and plotted zinc, lead and copper data for surface water monitoring points SW-2, SW-3 and SW-4. Concentrations of zinc, copper and lead were plotted as illustrated on the attached Graphs 1 through 3. The plots show concentrations on a logarithmic scale versus date on a linear scale, that is, the plot is semi-logarithmic. A line, representing the expected value



through time is drawn through each data set. These lines were drawn using an analytical feature of the spreadsheet program which computes an exponential least-squares best fit. That is, the line was drawn by the computer program so that it would be straight on the semi-log plot and that the sum of the squared deviations of the logarithms of the measured concentrations from the line would be minimized.

The least-squares best-fit method also allows a mathematical and objective test for determining the certainty of a trend, based on the steepness of the trend, the number of sample dates, and the amount of scatter. Contrary to NJDEP's conclusion, not one of the trend lines for zinc, copper, lead at any of the three (3) locations show a significant improvement in water quality. We disagree with NJDEP's conclusion.

We are also concerned that NJDEP's evaluation of the efficiency of the remedial efforts by Madison to protect the Runyon Watershed is not technically based. In reference to Madison's proposal for another shallow recovery system, NJDEP states:

"It is likely that better control of shallow groundwater in this area will further reduce contaminant levels in Pricketts Brook."

It is clear that Madison has not undertaken adequate measures to model groundwater flow or contaminant transport to provide scientific support that their proposal will address discharges to Pricketts Brook. The protection of the Runyon Watershed should not be based on the "likely" effectiveness of a remedial action, but on a scientific evaluation that would assure adequate measures were being conducted. In fact, there are statements in the Madison letter of April 3, 1998 which would indicate that the proposed shallow recovery well RS-2 will not influence the discharge of groundwater into the Brook. Mr. Vroeginday states on Page 3 paragraph 1 the following:

"RS-2 is expected to exhibit a horizontal, side gradient influence of approximately 150 feet, which will be adequate to capture and control shallow groundwater containing elevated levels of zinc in this area".

However, the closest of the proposed RS-2 wells is 250 feet from Pricketts Brook, thus the influence of RS-2 will fall 100 feet short of its influence to capture and control metals in the Brook. Therefore, we also disagree with NJDEP's conclusion that RS-2 will "Provide containment and control of the contaminated groundwater."

The minimum requirements to remediate a contaminated site are outlined in NJDEP's regulation NJAC 7:26E Technical Requirements for Site Remediation. In accordance with NJAC 7:26E-6.3:

"(a) As a first priority during remedial action, contaminants in all media shall be contained and/or stabilized to protect contaminant exposure to receptors and to prevent further movement of contaminants through any pathway."

As a result of the failure of CPS Industries, Madison Industries and NJDEP to remediate the contamination as ordered by Judge John E. O'Keefe on April 27, 1988, the City of Perth Amboy filed an action in Middlesex County Superior Court in the Spring of 1992. On July 2, 1992, Judge Hamlin ordered, in part, the following:

"3. NJDEPE shall, at Defendants' expense, take whatever action is necessary to capture and control the entire contaminant plume and remediate the contamination caused by the Defendants, including, but not limited to:"

"(b) Evaluating the effects of revising pumping rates of the existing ground water recovery system. A report containing this evaluation and any recommendations that result shall be provided to the Court within thirty (30) days of the date of this Order; and"

"(f) Taking any action and performing any needed work under this Order, contracting with any appropriate entity to do same or requiring defendants to perform any needed work. The Court specifically finds for the purpose of public contracting law, that work performed pursuant to this Order is of an emergent nature."

Nearly six years have passed since that order was issued, but the release of heavy metal contaminants by Madison Industries into Pricketts Brook and into the City of Perth Amboy's water supply continues.

The NDJEP has failed to comply with their own Technical Requirements and the Order issued by Judge Hamlin on July 2, 1992.

There are readily available options which could have been and can still be implemented by Madison Industries.

1. Additional recovery wells with adequate pumping rates could be installed along both sides of Pricketts Brook and the Perth Amboy property line to keep the groundwater levels below the Brook Invert and to prevent migration down gradient onto the City's Runyon Watershed.



Mayor Vas
June 1, 1998
Page 4

2. Pricketts Brook could be relocated around the Madison site and the areas of contamination, and additional recovery wells could be installed along the Madison/Perth Amboy property line to prevent the down gradient migration.

The lack of action by the NJDEP continues to permit the discharge of contamination into the Brook, threatening the public's health and safety and the environment within the Runyon Watershed. I encourage you to seek higher level NJDEP involvement in this matter. The complacent and defensive tone of the NJDEP Case Manager's letter does not provide confidence that Perth Amboy's or the public's interest are being protected. It was under very similar circumstances that the City of Perth Amboy filed the action before Judge Hamlin in 1992. I hope that this time we can convince NJDEP to take the appropriate enforcement action.

I will be available at your convenience should you wish to discuss this matter further.

Very truly yours,

KILLAM ASSOCIATES

A handwritten signature in cursive script, appearing to read 'Fletcher N. Platt, Jr.'.

Fletcher N. Platt, Jr. P.E.

cc: Louis Perez-Jimenez
Joseph Maraziti, Esq.

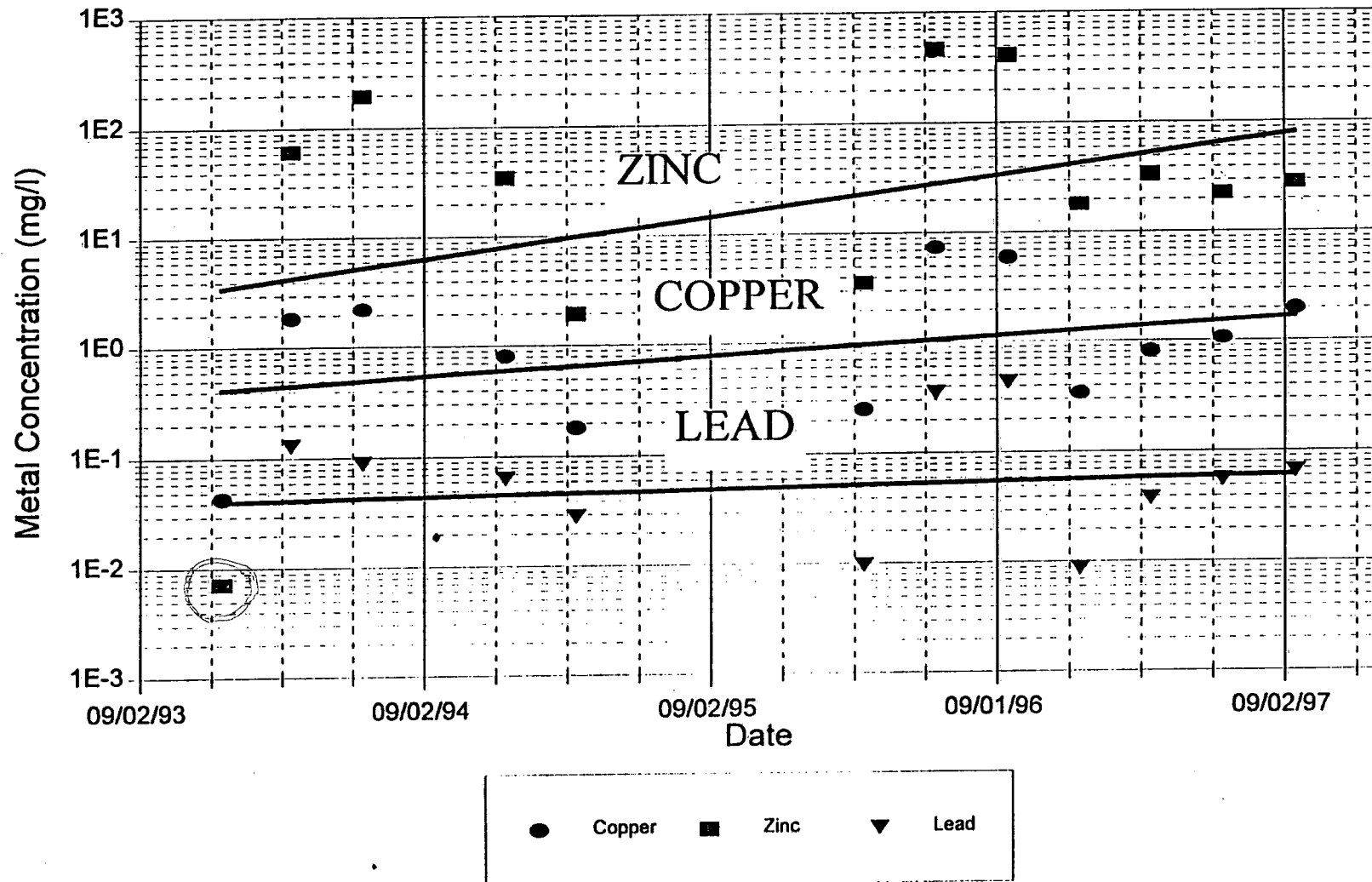
Enclosures:

Graph 1 through 3
Paul Harvey Letter of May 7, 1998

Graph 1

Perth Amboy - CPS/Madison
Surface Water Sampling Point SW-2

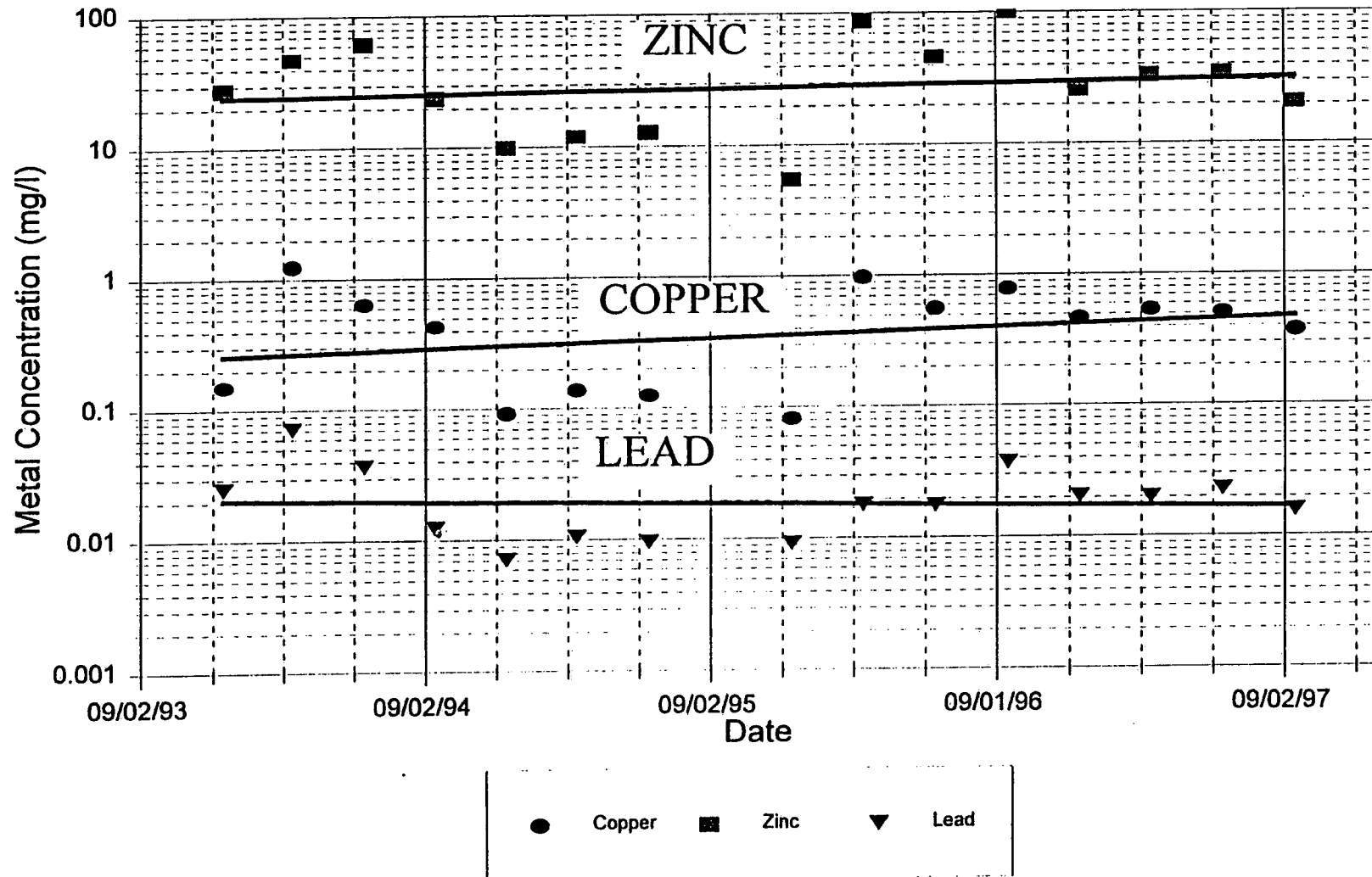
MCLs: Copper = 1 mg/l, Lead = 0.01 mg/l, Zinc = 5 mg/l



Graph 2

Perth Amboy - CPS/Madison
Surface Water Monitoring Point SW-3

MCLs: Copper = 1 mg/l, Lead = 0.01 mg/l, Zinc = 5 mg/l



Graph 3

Perth Amboy - CPS/Madison
Surface Water Monitoring Point SW-4
MCLs: Copper = 1 mg/l, Lead = 0.01 mg/l, Zinc = 5 mg/l

